

# memorandum

DATE: April 25, 1986

REPLY TO

ATTN OF: MA-224.2

SUBJECT: Designation of Preferred Process and Initiation of Definitive Design for the  
Special Isotope Separation Project  
TO: Assistant Secretary for Defense Programs

In order to consider decisions related to the designation of the preferred laser isotope separation technology for plutonium production, and the initiation of definitive design of a Special Isotope Separation (SIS) production facility, I convened the DOE Energy System Acquisition Advisory Board (ESAAB) on April 18 and 23, 1986. At the meeting on April 18, 1986, the results of the SIS Process Readiness Review, conducted January through March 1986; discussions of the need for the SIS capability; the scientific and engineering readiness to proceed; and other issues related to cost, schedule, and environmental considerations were reviewed. On April 23, 1986, the discussions focused on important process demonstration milestones, the interdependencies of the SIS and Uranium Enrichment programs, and integrated cost and schedule analyses. An executive session was then held to obtain the views and advice of the ESAAB members. As a result of this process, I have decided that the preferred technology for SIS is the Atomic Vapor Laser Isotope Separation (AVLIS), and that the Department should proceed with the definitive design of an SIS production facility.

I wish to emphasize that these decisions deal with very complex issues and technical considerations. The implementation of these actions is to be carefully executed with high priority assigned to obtaining conclusive results from AVLIS integrated demonstrations prior to a construction decision. Accordingly, the SIS Process Readiness Review team will review the technical progress of the AVLIS development at the appropriate demonstration milestones, and report their findings to the ESAAB. Also, a new internal DOE Independent Cost Estimate will be performed based upon the results of the conceptual design that is scheduled for completion in June 1986.

Therefore, you should proceed immediately with the following actions to implement these decisions:

- a. Work with the Assistant Secretary for Congressional, Intergovernmental, and Public Affairs to assure that the appropriate Members of Congress, committee members, and laboratory and field office officials are notified of the SIS decisions.

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- b. Initiate evaluation of potential sites for the SIS production plant and work with the Assistant Secretary, Environment, Safety, and Health for initiation of the related environmental documentation process. The process for designation of a preferred site should be initiated as soon as possible.
- c. Assure full coordination of these actions, and those related to budget planning and procurement, with the Assistant Secretary, Management and Administration, and appropriate staff officials.
- d. Assure proper distribution of the SIS Process Readiness Review final report.

I wish to commend you and your program managers for the excellent preparations and responsive support throughout this decisionmaking process. Your staff support to the important work of the SIS Process Readiness Review team, under the guidance of the Director of Energy Research, is also appreciated.



J. F. Salgado  
Under Secretary

cc:

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